

00:00 Come 00:17 Try it, it's not It's a Giga Sphinx. And from that time, every human being who addicted to a goes and a performance to calculate it. For example, Abu Raihan Al-Bayrouni, who in the 11th AD, developed the Plinthian, or the sky map, 07:19 And now, the Ester Lab, helped you determine where you are in the area from the sky above, and to know the height of the planets. To analyze the match to know if they're winning or 36:35 Of course AlphaGo is made it and they didn't know how to learn or play well But they didn't a game that games They made a child and let it try and learn by itself That's after a few years the team was develop in a similar way a program called AlphaZero that can play Go and it's and it has a third called Shogi The same program plays the third and third game teaches them the same way We can't enter a place where the AI doesn't know how one thing that's good like this blue No! Confucius said that men shouldn't play this and invest in it. This game is called Go. It's not very in the Arab But it's very famous in the East Asian Anyway, the Dems were ones who were for everything. Thank Okay, Abu Hamid, this is the hard 17:56 How do we know if the person resident or Dr. Hirman, the the court, prints a report on the documents. But it's not the best thing in keeping a lot Not in being to difficult If you're beginner in a 06:05 Yes, but dear, if your fingers and feet aren't enough, you need to something external to record the information you want to Someone might that Abu Hamid is a flash. And from our the numbering to Egypt, China, Greece and all over the As the first performance, the human body is the test of the human brain in its in the world of calculations. You're the who works with your That's the until 1642, when the scientist, Blaise Pascal, and he's 19 years invented a mechanical tool that can be used to and call it the Pascalene. 12:17 The father of computers 12:24 I love 13:05 The and the Fakro, we with the episode, who plays the game Tello, who beat his was written in the same way that Babbage and Ada Lavless. For 50 years, the IBM tabulating machines could never be with any other job that requires long whether for employees in offices or workers. Before that, group of scientists in Bletchley Park, Britain, and Alan Turing, created a computer album. It's a 21:28 by reducing the of electricity that's want to it, do And need a continuous You'll stay in the a fix, until you call the customer and they have a cash register. And first device to write a program in the 23:21 world of computers, whether in size of computing or in the computer science, programming, and float charts, algorithms, and things like that, we are here. 35:17 processor 35:46 you can movies, office these light things while the core i5 is suitable for use, half and half, so you can edit videos, do a photoshop, play nice something like core i7 that makes you play games but with quality, and make videos for you, and finally the core i9 8000, you do it 36:05 But much faster. Why these thinking they're the nature with the Prime Why aren't they about the cancerous 02:54 Because Demis was the second best in in chess, in his Why? 08:55 Leibniz was so powerful that 300 years ago, the number one in the world Unfortunately, there were two or three depending on the number And it took a long to do any computational Because, in the and the end, all mechanical. And before Demis gets married in February 1996, IBM's is ready to Kasparov. But Deep Blue's didn't And a year later, while Demis is getting in Cambridge in May 1997, he Deep Blue play Kasparov. Of the place itself doesn't understand this, but through some electrical Dr. Hillman can run it. So, when you a hole in a that's in the paper, you add a certain to it. And that was the time electricity in these computers. IBM, Abu Hamed, who made the Deblo, is the one. I don't want say this in a global But my dear, we'll make an episode after this, about how wars have us one of the discoveries. Because mechanical were faster than

the fast And world's computers were to control the phone's 24:16 The is Vacuum Tube Amplifier.26:34 They're gamers are jealous of, and they their lives Tell me, Abu Ahmed, is the PC the computer?what does it I want this to be a processor and some other That's Intel didn't make computers like IBM.33:10 240 minutes and this is the important part we find that we learn a new of the game that digs a hole in the left or right the block and throws the ball up so that it locked for as long as possible and breaks the number of blocks by itself dear, you realize how amazing this let me remind you that when this started playing, it know how ball and these blocks mean 33:35 The programmers themselves didn't know the new that the computer invented.Imagine, Zizi, you still have a inside 34:30 That's when you can learn and get into the of the universe, the of physics, make it for yourself, play with theories and equations, and you start these because you learn from them.If we at Intel, we will find that first processor it worked was the Intel 4004, which had 2300 transistors and could do 108,000 calculations per second.Maybe it's a If we control the game, we'll be solve it. The most important thing is, before you control the game, watch the previous watch the next episodes, watch the about resources, and we'll subscribe to channel.Gamer and streamer and Dalaik!02:00 Dear viewers, peace, mercy and blessings be Welcome to a of the The Victorious.06:27 You can return it when you want to. But, Abu Ahmed, this is something you'll remember.How do do Around 2500 years before the birth, not exactly in a between the two the Do own electricity, Abu Ahmed?Despite the simplicity of Pascaline, it was huge in the relationship between humans and they Because the first time, there's something else other than the human brain that can calculate it all by The this human being is to enter the numbers and that's So a human being can selfish and can't find way to So by Pascaline, he give you the answers.The machine in the Babi GD, was not machine that did calculations and peace.If you to someone who doesn't waste time, thinks about useful decide that you one who makes the computer beat the world champion in Go. 16:20 But how do I understand why the computer can beat Kasparov in chess?With the increase population, were expectations that the next mosque, which is the from 1890, would not be 17:07 14 years old!Thanks to this machine from Hermann, or what became known as the tabulating machine, the population was in the 1890.20:42 In the Army, one of IBM's was to calculate their projects.And maybe, dear, if and Britain didn't need it to win the war, they wouldn't have all that But my dear, don't want to this, but we're lucky that this happened.The Mark I was the first device to achieve the analytical engine of Babbage, which has for more than 100 years.The Electronic Numerical Integrator and Computer.25:07 The is the shape of the and its that's what we The transistor can make circles like the electrical circle.Since the computers that invented transistors were actually powered electricity, it was a coincidence that someone made similar like the computer on the chips.And this is the step that Robert Nice and Gordon Moore decided to take and founded Intel in 1908.I swear, it's No. 26:42 Because the processor is the computer's All the calculations and logic, and everything that happens inside, is what drives it. But it's not, because it's a computer's It's its own You can buy a processor, but it's very hard to use it yourself.Intel was specialized in processors.Until 1996, IBM had enough confidence that it the computer have processor enough to beat the world's in chess.If he does a single calculation operation in the move, means the processor calculates 200 million...the personal wasn't that Yeah, Abu Ahmed.That's why the Deblo players always him that Deblo can win in the game, because he really has ability to He calculates 12 moves in front him,

but it's impossible for any computer to calculate in the because it depends on the understanding.30:54 I mean, good but this is not an easy If I make a chess game, you'll first game has 20 possibilities, whereas in Go, you 361 possibilities.If we calculate all possible problems in chess, we'll that it's a big number.When AlphaGo in the second game against Lise, they didn't have a strategy.34:50 The great who worked on Demis and his in DeepMind, goes back to the great that happened in processors in 30 years.The Intel Pentium which was 20 years later in 1993, has 3,100,000 transistors and can do 6,600...But, I'd like to send message to DeepMind I know very that you're working on Alpha Dahiye. And I'll you Don't me Casparov, or I'll Sidon.I'll you reader.Sir, I came to buy my a I have but what the Look, he's got mustache, a mustache and a curly He's wearing glasses and has red on his face.Photoshop and Premiere?01:42 I the the Dalaik in the valley, I'm gonna go out and stream!Because he this You think about bad you won't lose for But Demis made a decision that he won't play chess again.I'm the last one in the episodes to wear an Anod Shirt.03:51 He makes the computer think about his He then relaxes brain and plays chess.Then he'll what he can achieve.But before he jumps on the chessboard, he decides work on simple game.How can the electric, wires, silicon and plastic to make a person?It was that made them flee from the seductive It was made them discover the fire.It the that led them to end agriculture and stability.1.5 kg, my led us to have whole societies and And big from humans living in one place.No. 06:42 The number in front it, despite its simplicity, was a quick and easy that can by simple like numbering, the distribution and the distribution.08:27 Of course, the one who can't do it alone, can do it with Because there's a person who can do it with Pascal himself couldn't do it his own hands.And after Pascal, in about 40 years, in 1673, the famous Leibniz's invented the Leibniz Wheel.Seriously, Abu Ahmed?And the show's biggest ambition is to play like Demis.He's 17 years and entered Cambridge He entered the Artificial Intelligence.And there's one of my who listens to a team in IBM.And instead of playing with a small brother, he's playing with a Casparov's 14:34 The world champion in chess.Despite the that Deep Blue won the first round of 6, he lost 3 and evened out 2 with Kasparov.And thus, lost the whole Man is defeated.And here comes Dr. Herman Hoyeris.What did Dr. Herman He brought the LiveMetal wheel that we talked about before.This is scattered in certain When the machine takes the paper and reads the information on it, the math you want to And it you the result.But I'm warning you, you add a number to after you it We used say that the lightness wheel, for example, needs someone next to it, because it's that runs it, and it's the that calculates the results.The tabulating machine revolutionized the computer world.He decided to in chain of money and founded the tabulating machine company.What is this, Abu Hamed?What is this Abu Hamed?The Manhattan Project was the project that produced nuclear plants.Another in the year 1943, under rule of Tommy Flowers, he Colossus, who was the his that should open the German Enigma.This means that the Mark I of America is a multi-use It's used in many It's all up to you to write what you want to on a strong that you're so of. And it's executed you.They are very big and they consume a lot And of course, very During the 20 years after the Second it focused more on making computers more efficient.And the first step in development was that computers turn from mechanical to electrical.24:46 know that, Abu Ahmed.The transistor, from time was in 1948, a from Bell Labs.IBMC.